PERFORMANCE SPACE AND PUBLIC MOVEMENT

An explanatory document submitted in partial fulfilment of the requirements for the degree of Master of Architecture (Professional), Unitec New Zealand, 2009
ABSTRACT

Performance venues and training spaces in Auckland tend to be exclusive, with little engagement or interaction with the general public on a daily basis. Their private functions are typically hidden away behind closed doors and can only be experienced by attending a show. Those in the field of performing arts have expressed their discontent at the lack of publicity and promotion of the creative industries. This research will therefore attempt to uncover ways that the public can better engage with the private functions of a performing arts venue.

Opportunities for public engagement were explored through the study of movement. The interaction between two dancers was studied to explore how it could conceptually inform the interaction between spaces of public and private use, and the form of the building. The site pedestrian movement was also analysed. In moving through and around the building the public will gain opportunities to engage with its private functions.
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1 INTRODUCTION
1.1 RESEARCH PROBLEM

Performing arts venues and training spaces in Auckland are generally hidden away behind closed doors and can only be experienced by attending a show. As a result there is little performance or interaction with the general public on a daily basis. Mason observed that:

*If all theatres were closed down one day, a large percentage of the people would know nothing about it until weeks later, but if one were to eliminate cinemas and television, the very next day the whole population would be in an uproar.*

Performance venues can often be very exclusive, with high ticket prices and limited access outside of performance times. Consequently, people are aware that the performing arts are practiced in these venues, however many never experience an actual performance.

This exclusivity of theatre has not always been such a problem. Before the introduction of media such as television, cinema and radio, theatre was a major form of entertainment. Movies then became easily and cheaply accessible which meant that many people no longer attended live performances. The theatre therefore became a place primarily for the upper class.

Those involved in the performing arts industry have expressed their discontent about this current situation. “Participants commonly perceive a relatively low level of promotion, publicity and celebration of the creative industries.” DANZ (Dance Aotearoa New Zealand), the national organisation for New Zealand Dance, aims to “increase the profile, interest in and understanding of dance.” One proposed method of achieving this is to “utilise new and wide-ranging promotional avenues for dance.” This project explores the potential for architecture to provide the means for this promotion, by facilitating the interaction between dance and the public on a daily basis. It asks the question, how can the public better engage with the private functions of a performing arts venue?

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4 Ibid.
A reason for this lack of daily interaction with the public stems from the way performing arts buildings are traditionally designed. These buildings commonly have limited interaction between segregated spaces of public and private use. “The inhabitant is in the deeper... parts of the building, and interfaces with the visitor through the shallower... parts of the building that form its principle circulation system.”\(^5\) This is especially true of most theatre architecture, where the performance on stage is the only form of public interaction in the building. Here dancers are viewed under strict conditions, with performance lighting, stage sets, costumes, makeup and carefully controlled seating conditions.

Traditional theatre buildings limit public interaction to one dimension of the performing arts. The public are unable to experience the ‘behind the scenes’ learning of skills or preparation of a performance. In order to increase public engagement, the complex will be designed to allow the public a view into spaces which would traditionally be hidden. This includes studio spaces used for both practice and casual performance.

This approach may appear to be a hindrance to performance, as preparation is normally hidden from view until it is presented on stage. There is value in the element of surprise, where the audience is exposed to dance choreography which had previously remained unseen. While acknowledging the value in concealing preparation spaces, there is also potential for the exposure of other aspects of dance. For example, the use of dance studios is not limited to performance rehearsals. Uses such as recreational and social dance, casual classes, exam preparation and casual performance would not suffer from public exposure. Also, dancers in their nature enjoy performing to an audience. What is the point of dance as a performing art if dancers rarely perform?

A performing arts venue designed according to this research could reflect the creative nature of Auckland City and benefit its urban environment, general public and the performing arts industry. A report published by the Auckland City Council states:

\begin{quote}
The quality of the urban environment is seen as a key symbol of the extent to which any city values and supports creativity. A visually interesting, dynamic and diverse city centre attracts creative people, stimulates creative activity and opportunities.\end{quote}\(^6\)


\(^6\) Auckland City Council, "Snapshot: Auckland's Creative Industries Report."
Casual public performance adds to the vitality and atmosphere of the city by providing free entertainment and attracting an audience.

Public exposure on a daily basis may result in the acknowledgement, appreciation and interest in the performing artists. It will expose the public to a variety of genres and may also provide inspiration for other performing and visual artists. Casual performance space will give emerging performing artists the opportunity to gain performing experience and increase their ‘fan base’. This publicity may also serve to advertise upcoming performances and merchandise. It could encourage a greater involvement in the performing arts, including increased performance and class attendance. Greater involvement would bring economic benefits and increased employment in the performing arts industry. This would provide more money to be invested into the growth of the industry and the development of individual artists, companies and venues.

CURRENT NEED FOR PERFORMING ARTS VENUES

Auckland City has the largest creative industry in New Zealand, with 14,000\(^7\) participants. The performing arts rely heavily on facilities such as theatres and rehearsal spaces. There is a current shortage of performing arts venues needed for the many potential live performances in Auckland. Additional venues will further enforce Auckland as the creative hub of New Zealand. The Maidment Theatre is currently the only medium sized theatre in Auckland, seating 450\(^8\). The Q Theatre, due to be completed by 2011, will have a flexible seating capacity of 350-460\(^9\) people. This compares to Wellington which has five medium sized venues and Brisbane which has six\(^10\). Medium sized theatres can economically support small to medium professional touring companies. Small scale productions are “widely recognised as the source of much innovation in the arts.”\(^11\) An additional venue will support festivals such as Tempo°, New Zealand’s Festival of Dance\(^12\) and Auckland Festival\(^13\). There is also a need for dance studio spaces in Auckland. DANZ (Dance Aotearoa New Zealand) states an aim to “establish recognised ‘dance houses’ that provide space for teaching, rehearsing and performing.”\(^14\)

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\(^8\) The University of Auckland, “Maidment Theatre - Te Atamira,” http://www.maidment.auckland.ac.nz/.


\(^12\) Tempo° New Zealand’s Festival of Dance, “About Tempo° ” http://www.tempo.co.nz/about.htm.


\(^14\) DANZ, “Blueprint for Action.”
**PROGRAMME**

The programme was selected with the intention of drawing the public into the building and allowing them to engage with the performing arts. The building contains a 400 seat dance theatre, casual performance spaces, dance studios, retailers, administration and social spaces. The venue will also contain supporting facilities such as a media room, computer lab, and gymnasium with a sprung floor and trampolines. The building will host professional touring companies, a resident dance academy, casual classes and studios for hire. Casual indoor and outdoor performance venues will also be made available to other performing arts, including musicians, singers and actors.

**SECONDARY RESEARCH PROBLEMS**

A secondary research problem that was evident was the failure of most buildings in the Auckland Central Business District to “reflect the creative nature”\(^\text{15}\) of Auckland City. A report released by the Auckland City Council revealed a common opinion that Auckland has “poor urban design and planning; and that it is developing with little attention to aesthetic considerations.”\(^\text{16}\) This project will also attempt to discover how a building’s creative function can directly influence its design.

Another design problem arises from the site choice and condition. The site is nestled behind the Auckland Town Hall at the end of Greys Avenue, and includes the tunnel under Mayoral Drive. It is currently used as a car park. The site contains the pedestrian link between two prominent outdoor urban spaces in Auckland City: Aotea Square and Myers Park. Aotea Square is primarily a paved urban space, while Myers Park in contrast provides green space with trees and a children’s play ground. The city blocks of Myers Park and the Auckland Town Hall were initially connected until the construction of Mayoral Drive. Mayoral Drive is in effect a mound of earth with a tunnel through it separating these two spaces. This tunnel is dark, unpleasant, and often inhabited by the homeless. The design will aim to enhance this existing pedestrian connection.

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1.2 RESEARCH CONTRIBUTION

This research problem has been identified primarily through gaps in the way performing arts buildings are designed and used. Research into the current state of knowledge is largely centred on recent architectural precedents which challenge the traditional privacy of performing arts buildings. These buildings allow some level of public engagement, but are not largely focused on this interaction. As a result this project will develop ideas of public engagement and the existing performing arts building typology to form a ‘performance centre.’ This is a building in which practice spaces are exposed to the public and in effect become performance spaces.

This project develops ideas of public interaction by exploring the role of public movement in the experience of a building and its private functions. It investigates how existing site pedestrian movement can be used to draw people into the building. Existing knowledge will inform how a building can provoke an awareness of movement. Performance groups and theatre typologies that push the boundaries of traditional theatre were also studied to explore new ways of engaging the audience. The freer expression of the performers’ use of space influenced the architecture.

1.3 OVERVIEW OF METHODOLOGY

The methodology of this project is largely driven by a research-by-design process. It involves the exploration of dancer and pedestrian movement and was developed through a series of ‘design experiments’.

The interaction between two contemporary dancers was studied to explore how it could conceptually inform the relationship between spaces of public and private use. The dancers’ movement was documented, processed and analysed to explore how it could be translated into an architectural result. This allows the building’s creative function to directly influence its design.

In conjunction with the study of dancers’ movement, pedestrian movement within and around the site was also studied. Pedestrian movement was the main criteria for site choice, and the focus of site and context analysis. Site movement was digitally mapped and then further analysed to form the building circulation diagram.
1.4 SCOPE AND LIMITATIONS

The primary aim of studying the dancers’ movement was to explore how it could conceptually inform the relationship between spaces of public and private use. The purpose of this investigation was not to produce a building which formally represents the movement of dancers. Instead the dancer investigation influenced the design formally in terms of the dynamic expression of spatial relationships.

The focus of the research was in the relationship between spaces of public and private use, not in the individual spaces themselves. Therefore the project was not focussed on designing an intimate theatre auditorium or developing the auditorium typology.

DEFINITION OF KEY TERMS:

The terms ‘public’ and ‘private’ have been used so far in this discussion and it is necessary to define their use as outlined in this study.

The term ‘public’ is used to describe visitors to the building. These visitors do not use the private functions of the building. This includes pedestrians passing through and around the building.

The term ‘private’ refers to the building occupants. Therefore ‘private functions’ are the programmatic functions relating to dance. These functions are undertaken by the building occupants.
2 CURRENT STATE OF KNOWLEDGE
2.1 ARCHITECTURAL PRECEDENTS

The foundation of this research was largely rooted in key architectural precedents which challenge the traditional privacy of performing arts buildings. These projects illustrate the recent change in the way some performing arts buildings are designed. Instead of the elitism traditionally associated with theatre, these projects move towards allowing the public into the building on a daily basis, with some visible connection to the private activities. Also studied were precedents which address issues of movement and connection to the landscape.

EYEBEAM MUSEUM OF ART AND TECHNOLOGY

New York practice Diller Scofidio + Renfro explore the relationship between audience and performer, public and private space, through their architecture. An example of this is in the Eyebeam Museum of Art and Technology, which contains both production and gallery space for media art. These two functions are separated by an undulating ribbon that winds its way up the building, folding from floor to wall to ceiling. This ribbon therefore separates the residents and visitors of the building. It simultaneously determines form and the relationship between spaces of presentation and production (see figure 2.1). Glass walls provide visual connection between some spaces, while in other areas a sharing of space occurs. The ribbon is “occasionally sheared allowing alternate levels to align and thus conjoin production and presentation spaces.”17 This building provides a very literal representation of the relationship between spaces of public and private use.

18 Ibid.
LINCOLN CENTER FOR THE PERFORMING ARTS

The redesign of the Lincoln Center for the Performing Arts is another building by Diller Scofidio + Renfro which has influenced this project. The complex includes the Alice Tully Hall, Juilliard School of Music, School of American Ballet and public spaces. The Lincoln Center for the Performing Arts originally opened in stages from 1962 – 1969. It was built on a platform 7.3m above street level on its northern and western boundaries, with very little connection to the surrounding urban environment.

The complex has been redesigned to better engage with the public. The Alice Tully-Juilliard building was initially an uninviting brutalist building which Diller Scofidio + Renfro “ingeniously reconfigured to announce to anybody passing by, ‘Come in, we’re here, make yourself at home!’”[^19] The architects extended the building with a large triangular canopy towards Broadway, giving the impression that the corner has been diagonally sliced away to reveal the internal social spaces and a dance studio. The foyer, which includes a bar and café, has been designed as a social space open to the public day and night. An outdoor seating stand faces the foyer, creating a show of its internal activities.


Two new dance studios were added to the School of American Ballet in this complex. These studios feature polymer-dispersed liquid crystal glass walls which turn from translucent to transparent with the application of an electric current (see figures 2.3 and 2.4). This gives the studios flexibility to be either visible from the mezzanine lounge or hidden from view. This mezzanine lounge is accessed by building occupants, parents and select visitors, but not the general public.

While the redesign allows some public access to the Lincoln Center for Performing Arts, this connection is mostly limited to foyer spaces. An exposed dance studio overlooking a busy intersection is the only aspect of the performing arts that engages with the public. This studio can be seen from outside the building. Due to the reflective nature of glass, the interior of this studio is visible only when the space is lit from inside. Public access to the building seems pointless if people are not able to engage more with the performing arts. Otherwise the building is just another complex with retailers on the ground floor. In saying this, the fact that the project is a redevelopment of an existing complex largely limits the possibilities for increased public engagement. The architects were restricted by the existing building form, programme and spatial arrangement.

Figure 2.3 Polymer-dispersed liquid crystal glass in a translucent state

Figure 2.4 Polymer-dispersed liquid crystal glass in a transparent state

22 Ibid.
LABAN DANCE CENTER

The Laban Dance Center, designed by Herzog & de Meuron, also addresses issues of public interaction. Translucent polycarbonate panels on the curved facades allow “the regular activities of Laban, training, rehearsals, research and workshops … [to be] semi-visible through the walls from the outside.” This effect is visible mostly at night, when spaces are internally lit.

The public can only access a limited section of the building. Therefore internal spaces focus mostly on the interaction between building occupants, rather than between occupants and visitors. Functions are dispersed throughout the centre to promote social interaction. The glass walls of the central circulation route enhance this interaction by providing a view into social spaces and some dance studios. Subtle curves and ramps express movement while maintaining the regularity required for dance studio spaces.


Figure 2.5 Laban Dance Center

THE VILLA SAVOYE

The Villa Savoye, designed by Le Corbusier, forms a prime example of how a building can subtly provoke an awareness of movement. This house features two vertical circulation paths: a ramp placed at a near tangent to a spiral staircase (see figure 2.4). The ramp is “a kind of tilted floor plane, it connects the separate stories in a continuous path through space-time as incremental stairs cannot.”

It can therefore be travelled without concentrating on foot placement, encouraging people instead to focus on the flow of pedestrians on the spiral staircase. “Then we are acutely aware of our own movement by its periodic relation to that of another participant.”

The contrast between stepping up a curved staircase versus walking along a straight ramp will provoke this awareness.

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CARPENTER CENTRE FOR THE VISUAL ARTS

The Carpenter Centre for the Visual Arts at Harvard University has a central theme of movement. While analysing the site, Le Corbusier was “intrigued by the flow of people through this space between classes.”

This circulation then formed the concept for the building. An s-shaped ramp dissecting the building forms a pedestrian link between two streets. This ramp provides a view into the studio and exhibition spaces, allowing pedestrians to engage with the internal activities as they move through the building.

DE YOUNG MUSEUM

The De Young Museum by Herzog & de Meuron provides an example of how visual connection to the park can be maintained throughout the building. A series of internal courtyards containing vegetation serve to draw some of the landscape into the centre of the building.

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2.2 CRITIQUE OF ARCHITECTURAL PRECEDENTS

The buildings that have been discussed allow some level of public engagement, but are not largely focused on this interaction. Instead they concentrate on the interaction between building occupants, as opposed to between occupants and visitors. Public access and engagement is mainly focused on the social areas of the building, rather than spaces of private use. The Eyebeam Museum of Art and Technology explores the relationship between spaces of public and private use. However this internal interaction exists only once a visitor has purposefully entered the building to view the work on display.

Both the Lincoln Center for the Performing Arts and the Laban Dance Center fail to use the existing public pedestrian movement to draw people inside the building. Depending on the site, pedestrian movement could be channelled through the building to increase public engagement with interior spaces. An example of this is the Carpenter Centre, which forms a public circulation route to encourage pedestrian movement through the building.

These architectural precedents are all international examples. There is a lack of choreographed public engagement within local performing arts buildings. The Auckland Performing Arts Centre (TAPAC) allows some interaction; however this is limited to the glass wall of a dance studio overlooking a field in Western Springs.

Figure 2.9 A dance studio of The Auckland Performing Arts Centre\textsuperscript{31}

2.3 PERFORMING ARTS

The research for this project was not limited to the field of architecture. Studying existing theatre buildings brings an awareness of how architects have previously dealt with programmatic requirements and issues of privacy and publicity. However, a building design based purely on architectural precedents will produce more of the same thing. It will not challenge the existing performing arts typology. Therefore performance groups and theatre typologies that push the boundaries of traditional theatre were studied to explore new ways of engaging the audience.

POOR THEATRE

The concept of viewing dance outside of the controlled theatre auditorium is influenced by the writing of Jerzy Grotowski in his book *Towards a Poor Theatre*. Grotowski believes that the primary advantage of live theatre over television is the close proximity and interaction between performer and audience. He states that “The core of the theatre is the encounter.”

Grotowski proposes a theatre which, instead of technologically competing with film and television, should become poor.

This is a theatre which removes all “superfluous” aspects, such as lighting, scenery, costumes and make-up, leaving only the actor and spectator as the centre of the theatre.

STREET THEATRE

Street Theatre is another activity which strips away elements of traditional theatre. Street performance abandons the restrictions of conventional theatre buildings, instead performing in public spaces such as streets, parks, and cafes. These spaces provide exposure to a wider audience than frequent theatre-goers. As Mason writes, “The purpose of doing theatre on the streets is to reach people who are unfamiliar with theatre, it therefore can never afford to become too elitist.”

In contrast to a theatre auditorium, this casual environment allows for increased interaction between performer and audience. Performers are no longer restricted by stage space, and can encircle and move among their audience. Street theatre provides performers with an opportunity to earn extra money through busking, gain publicity, or improve their

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33 Ibid., 19.
performance skills. Today many local authorities have recognised the benefits street performance can have upon the urban environment. Performances are welcomed to enliven the atmosphere of public spaces.

**HAPPENINGS**

The Happenings, experimental theatre performances predominantly of the 1960’s, were also studied to provide direction for this project. The Happenings rejected the traditional spatial arrangement of the theatre, instead holding small performances in spaces such as stores, lofts, and outdoors. They attempted to “break down the ‘barrier’ between presentation and spectator,” by manipulating the physical relationship between audience and performer. The Happenings abandoned the notion that every member of the audience must obtain the same view. Some performances gave spectators control of the performer-audience relationship by allowing them to move around and select their own viewpoint. Other performances lead spectators through a series of different performance stations.

Hungarian theatre company Squat also explored the relationship between spectator and performer. A storefront window formed the backdrop to their New York theatre space. This meant that passers-by on the street outside became part of the performance, yet could also look through the window to view the presentation on stage.

Ideas from the experimental theatre of the 1960’s are still evolving in New Zealand today, through performers who continually experiment with unconventional performance spaces and the relationship between spectator and performer. A local example of this is a performance by Auckland hip hop company Triple8funk, on September 12, 2009. Triple8funk performed a 30 second routine in the centre of a busy Queen Street intersection during a pedestrian crossing. The dance was viewed by pedestrians moving around the performance and drivers stopped at the traffic lights. The “Auckland Fringe Festival” provides another recent example of experimental theatre. The festival presents an unconventional “mix of in your face drama, off the wall dance, music, comedy, cabaret and outdoor adventures.”

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37 Ibid.
Merce Cunningham also experimented with digital motion capture technology in his work. Motion capture involves the three-dimensional recording of dancers’ movement. It “serves to ‘liberate’ movement from the actual, human bodies in which it originates,” forming the “dance minus the dancer” in virtual space. An example of this is in his 1999 production “BIPED,” where live dancers perform with a projected video of motion captured movement.

Figure 2.10 BIPED

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38 Valerie A. Briginshaw, Dance, Space, and Subjectivity (New York: Palgrave, 2001), 189.
40 Ibid.
DECOi Architects investigated the process of using motion capture to generate the physical form of Ether/I. They recorded multiple performances of the same set of choreography. The form of the sculpture was derived from the difference between each performance; a trace not of the dancers’ physical bodies, but the “negative trace of two dancers in space not visible by the human eye.” This mapped trace of movement was translated into a twisting form constructed from a series of aluminium lattice frames.

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2.4 EXPERIENCE THROUGH MOVEMENT

Bloomer and Moore discuss how buildings are experienced through the movement of the human body. Architecture can function “as a potential stimulus for movement... an incitement to action, a stage for movement and interaction.” Diagonal forms in a building appear imbalanced and dynamic. Diagonal movement paths can therefore generate a sense of disorientation, which fosters a greater awareness of one’s own movement. This dynamic disorientation, while exciting in small doses, cannot form the entire building. Therefore more restrained methods of experiencing movement are also required, such as the relationship between the ramp and staircase in the Villa Savoye.

THE CONCISE TOWNSCAPE

In *The Concise Townscape*, Gordon Cullen describes how a town is experienced through the movement of pedestrians. Elements of the urban environment are revealed to a moving pedestrian through a series of “jerks or revelations. This we call SERIAL VISION.” A town can be designed to impact the emotions through a contrasting sequence of spaces. An example of this is the dynamic experience of moving from an enclosed tight space to a large open volume.

Cullen also defines the “existing view and the emerging view.” This compares the view of the presently inhabited space to the view of the vista ahead, slowly revealing itself through pedestrian motion. If a view is not continually developing as pedestrians move through the town it will quickly become dull and tedious. Cullen illustrates this using a photographic sequence along a straight road in New Dehli. The pedestrian first gains a glimpse of the building in the distance, but this view is then partially hidden then revealed to create four different views until the destination is reached.

![Photographic sequence moving through New Dehli](image)

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46 Ibid.
2.5 ORDERING OF SPACE

In their book *The Social Logic of Space*, Bill Hillier and Julienne Hanson discuss “ways in which strategic architectural decisions about built form and spatial organisation may have social consequences.” The spatial arrangement of a building determines movement patterns and therefore social encounters. Hillier and Hanson outline two groups of people that use a building: inhabitants and visitors. Inhabitants to some extent are static in their use of the building. Visitors on the other hand are transitory; they are constantly arriving and leaving the building. Visitors may enter parts of the building but have no control over its use. The spatial arrangement of a building largely determines the relationship between visitors and inhabitants.

A building contains an “ordering of boundaries,” both within the building and at its perimeter. The “inhabitant-visitor interface” is the boundary which controls the relationship between spaces of public and private use. Restrictions at this boundary must be reduced in order to generate encounters. This ‘inhabitant-visitor interface’ is limited to the glass outer boundary of many buildings. Building interiors are exposed to the public outside, but this is an “inaccessible spatiality,” a boundary with visual but not spatial connection.

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48 Hillier and Hanson, *The Social Logic of Space*, ix.
49 Ibid., 146.
50 Ibid., 176.
51 Ibid., 161.
2.6 CONCLUSION

Research into the performing arts ascertained how performers interact with an audience when not restricted by a theatre building. The freer expression of the performers’ use of space has the potential to influence architecture. The building can therefore provide unconventional performance spaces that challenge the dancers to enhance audience engagement.

The work of Bloomer and Moore, based on the experience of movement, highlights the potential for architecture to choreograph the movement of pedestrians in relation to the movement of dancers. This would form an audience awareness of both self-movement and dancer movement. The authors show how the design of a building could be focused on pedestrian movement, rather than the formal representation of movement.

The writings of Gordon Cullen can be applied to the journey through architectural space, instead of only the outdoor urban landscape of a town. His theories have however, been criticised for being too picturesque. Hillier and Hanson identified the need to increase interaction at the boundary separating visitors from inhabitants. Visitors can then better relate to building occupants and spaces of private use. Hillier has been previously criticised for being too rational and mathematical in his approach to spatial ordering.
3  PROJECT DEVELOPMENT
3.1 SITE SELECTION AND ANALYSIS

The main criteria for site choice included localised pedestrian movement, visibility and close proximity to social, performing arts and entertainment venues. This is due to the public need to see the building, move through and around it in order to engage with its private functions. The site selected is the car park on Greys Avenue behind the Town Hall, between Myers Park and Aotea Square.

SITE CONTEXT USE:

The site is located within the Aotea Quarter. The quarter is envisioned by the Auckland City Council to be “the city’s civic core, cultural heart, arts and entertainment hub: a vibrant centre for people where senses are indulged, creativity expressed, activities and events enjoyed, and civic life participated in.”52 A performing arts complex would build on existing creative activity and serve to enhance the Aotea Quarter as the creative hub of Auckland City.

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52 Council, “Aotea Quarter Plan.”
The area surrounding the site, south of the Town Hall, has been identified by the Auckland City Council as a future site for an arts precinct. This will include a range of performance and rehearsal spaces, creative businesses, bars and cafes. This precinct already contains a music shop, the Basement Theatre, Classic Comedy and Bar and the future Q Theatre Site. The project will be designed according to this development.

The Aotea Quarter contains additional prominent performing arts venues such as the Aotea Centre, Civic Theatre and the Auckland Town Hall. The wider site context contains supporting facilities such as universities, performing arts training venues, specialty shops and recording studios for music, film, television and radio. Advantages of adding a new venue to this area include the opportunity to share resources and encourage creative interaction between visual and performing artists. The location of the site in the centre of the Auckland Central Business District means that it is also surrounded by a large number of businesses, residential developments, hotels, education providers, shops, cafes and bars. As a result of these facilities, the Aotea Quarter embraces a large volume of pedestrian traffic day and night. Approximately 22,000 people per day visit the quarter. Aotea Square acts as a “blank canvas adaptable to many activities,” both formal and informal in nature. Its uses include events and performances, recreation, eating and shopping. (See appendix A for further site analysis diagrams)

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53 Ibid.
**SITE ACCESS:**
The site is easily accessed by car, public transport or by foot. It is surrounded by major bus routes and is within walking distance from Britomart Transport Centre and the Auckland Ferry Terminal at the end of Queen St. The Civic Car Park underneath Aotea Square provides sufficient parking for events, and services a wide area around the site. The pedestrian entrance to the Civic Car Park is beside the Town Hall on the eastern side of Aotea Square. This presents the opportunity for the building to form a public pedestrian link between the southern corner of Aotea Square and the corner of Queen St and Mayoral Drive (see figure 2.15). This link would service the many people who park in the Civic Car Park and travel south or east. The project also aims to improve the existing pedestrian connection between Aotea Square and Myers Park. This is in line with the Auckland City Council aim of “enhancing the pedestrian networks”\(^{56}\) in the Auckland Central Business District. Pedestrian links will serve to draw visitors through the building and create opportunities for the public to engage with its private functions.

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**SITE MOVEMENT:**
The site history also involves movement. William Hobson chose the site for Auckland City in the mid 1800’s, when Queen St was a fern covered, swampy valley. The Wai Horotiu Stream started in what is now Myers Park, flowing through the site and alongside Queen St to the sea. As the town began to expand and population increased this stream became the main sewer outlet. In the mid 19\(^{th}\) century the Wai Horotiu stream was channelled underground. This makes the site choice appropriate for research and design involving movement.

![Figure 3.3 Proposed pedestrian link](image)
MODEL 1:

A conceptual model was made which abstracted and expressed these site qualities of movement within the existing urban environment. The layered Perspex conveys the light, transparent quality of the Wai Horotiu Stream which once flowed through the site. The Perspex can also represent the desire lines of individual people, moving around existing buildings and the urban infrastructure. This Perspex ‘movement’ is in contrast with the solid, stationary mass of the existing structures on site, modelled from cork. This model also serves to convey material qualities of the site context: the grungy brick western facades of the Queen St buildings versus the modernist glass facades of Mayoral Drive. The two materials can also represent the public pedestrian routes through the building versus the enclosed private spaces.
3.2 DANCER DOCUMENTATION

The methodological approach to this project is largely driven by an explorative research-by-design process. A series of ‘design experiments’ were conducted and analysed in terms of their possible architectural application. The interaction between two dancers was studied to explore how it could conceptually inform the interaction between spaces of public and private use. The mapping of dancer’s movement created a digital form of the dance. This “dance minus the dancer”\(^{57}\) generated a three dimensional form of the spatial relationships, allowing the building’s function to directly influence its design. The dancers’ movement was documented, processed and analysed to explore how it could be translated into an architectural result.

Initially the movement of two contemporary dancers was documented through the use of photographs and video footage. At this stage the next step was unknown so a variety of footage was shot in order to keep options open. Coloured dots were tied to the dancers’ joints in order to make the frames easier to trace digitally. Long exposure photographs were shot with the male dancer dressed in blue and the female in red. These images were taken in the hope that areas where the dancers overlapped would appear purple; and in relation to the research exploration, a space of shared public and private use. While these shots produced interesting results, they did not prove useful compared to the sequential photographs and video footage and were not further processed or analysed. (See Appendix B for further images)

\(^{57}\)Copeland, Merce Cunningham : The Modernizing of Modern Dance, 191.
3.3 DANCER ANALYSIS:

MODEL 2:

The first step in processing this documentation was a laser-cut model derived from sequential photographs of the dancers’ movement (see Appendix B for photographs). The outlines of the individual male and female dancers were abstracted and laser cut from blue and red transparent Perspex. This model was made with the aim that three separate forms would be visible: red ‘public space’, blue ‘private space’ and purple ‘shared space’. The relationships between these forms were then to be analysed both formally and in terms of possible spatial relationships.

In reality the layered Perspex became too opaque and did not allow these three forms to be clearly read as intended. An unexpected outcome was an image of the model photographed on top of a light box (see Figure 3.6). This image appears as an x-ray, with the dark blue ‘bones’ behind the red ‘skin’. This image in some way describes the project because the building is aiming to provide the public with an ‘x-ray’ view into the internal, traditionally hidden parts of a performing arts building.
BOUNDARY DIAGRAMS:

Hillier and Hanson’s ideas of “inhabitant-visitor interface”\(^\text{58}\) were further developed through diagrams exploring the boundary between spaces of public and private use.

Three boundary conditions:

1. Spaces of public and private use share a solid, opaque boundary but do not interact.
2. The two boundaries overlap to form a single space of shared public and private use in the middle.
3. The two spaces share a common boundary which allows interaction between spaces. This is an “inaccessible spatiality,”\(^\text{59}\) with visual but not spatial connection.

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\(^{58}\) Hillier and Hanson, *The Social Logic of Space*, 176.

\(^{59}\) Ibid., 161.
**MODEL 3:**

These boundary conditions were then applied to the abstracted outlines of dancers’ bodies traced from frames of the video footage (see Appendix B for video frames). This sequence of individual frames was laser cut from Perspex. The male dancer representing spaces of private use was cut from opaque white Perspex. The female dancer represents public space and was cut from transparent Perspex. Where the bodies of the two dancers touched each other but did not overlap, the line was treated as a shared boundary in clear Perspex. A sequence of choreography was chosen that involved a combination of only one dancer moving at a time, both dancers moving, the two dancers apart and together.

*Figure 3.8 Model 3*
The spatial relationships generated in this model were then analysed and developed into further models and drawings. A section of the model was analysed in terms of the level of privacy within each space. The two ways a public view was allowed into the ‘private’ spaces were through the clear Perspex boundary and where the variation of individual frames causes the spatial boundary to split, allowing a direct view into the space.

A split boundary can have a similar effect to Merce Cunningham’s use of visual obstacles, or De Keersmaeker’s performance which is viewed through windows and doorways. Split spatial boundaries may encourage spectators to remain visually active while viewing the performance. It may increase interest in the performance and enable the audience to move closer and gain an unobstructed view.
MODEL 4:

A conceptual model was then made in Revit and printed three dimensionally via stereo-lithography. This model explores how a single spatial boundary can split to allow interaction between two spaces and an intermediate space in the middle.

DRAWINGS

This idea was further developed through drawings to explore how a split boundary can control what is visible from different viewpoints.

Figure 3.12 Revit model

Figure 3.13 Boundary drawings
Another aspect observed in the public-private analysis was the gradient between spaces of public and private use. This was modelled diagrammatically to show four levels of privacy:

1. **Public Space:**
   Public spaces are accessible to the public but do not contain private dance functions. This includes the foyer, circulation spaces and retailers.

2. **Shared spaces of public and private use:**
   These are dance spaces within the circulation and foyer space that can be physically accessed by the public. They allow spectators to move around the performance and select their own vantage points, instead of being restricted to the traditional single point perspective view of the dance.

3. **Spaces of private use with a transparent boundary:**
   These spaces allow visual connection to public spaces, but cannot be physically accessed by the public. They will contain both practice and performance. Although they may function largely as practice spaces, their visibility in effect turns them into performance space.

4. **Private space:**
   Private spaces cannot be seen or accessed by the general public. They include dance studios, offices and performers dressing rooms.
This gradient from public to private was applied to the building, radiating out from the public circulation route (see Figure 3.25). Therefore the section through the centre of the site will contain largely public spaces, while each end of the site will predominantly contain private space.

This gradient was also applied in section, where the levels of Mayoral Drive and Myers Park will contain the most public space. This is because the majority of visitors moving through the building will only use these two levels. Below and above these levels are less likely to be accessed by the public and therefore will contain mostly private spaces.

The sequence of the model contains variation in the definition of spatial boundaries. Both ends feature clearly defined spatial boundaries. This is due to the simplicity of form and because some boundaries remained constant across many frames. These spaces can refer to spaces of private use in the building. Spaces such as offices, computer labs and dance studios have more clearly defined movement patterns and stricter programmatic requirements than public foyer spaces. They must therefore be largely regular in shape with clean boundaries. In contrast, the centre of the model features frames where the dancers overlap to create less defined, untidy spatial boundaries. These frames contain a large volume of spaces of shared public and private use. This could refer to spaces in a building where human movement is more intensely populated and unpredictable, such as foyer spaces. These spaces have fewer programmatic requirements and their form is not restricted by function to the degree of private spaces. Therefore the building may have a gradient from untidy – clearly defined spatial boundaries, which would coincide with the gradient from public – private space.
The underneath elevation of the dancer outline model further influenced the project (see Figure 3.16). The internal spatial layers of the model are visible through the clear Perspex boundary of this elevation. The internal clear and opaque boundaries weave in and out of each other, creating varied levels of visible and hidden space. This could influence the gradient from public to private space in the building, with varying levels of visible space radiating out from the public circulation routes. A possible built application was drawn directly from this view, adding scale, people and materials (see Figure 3.17).
This model elevation could also be applied to the façade treatment of the building. A regular glass façade would enclose the angular internal form. This would enable sensitivity to the surrounding architecture. It may also serve to draw peoples’ eye in to the building, where dancers would be visible. Internal material detail could also achieve this. This is opposed to a complicated angular facade, which would detract attention from the internal happenings of the building. The problem with a simple façade is that it would fail to catch the eye at all. It is therefore necessary to draw attention to the building from a distance (see Figure 3.18), but then serve to highlight the internal activities of the building (see Figure 3.19). The form could subtly direct vision into the building.

**Figure 3.18  Façade that is eye-catching from a distance**

**Figure 3.19  Simple façade which draws the eye into the building**

**TWO-DIMENSIONAL MOVEMENT MAPPING**

The dancers’ movement was also mapped two-dimensionally, by digitally tracing the movement of each joint using 3D Studio Max. The resulting image was not pursued further.

**Figure 3.20  Two-dimensionally traced movement**
3.4 SITE MOVEMENT MAPPING

One problem with the laser cut dancer models was the linear nature of the movement. This is in contrast with the multi-directional site movement and the irregular shape of the site. Therefore the output from the dancer exploration required a three dimensional circulation framework to which it could be applied. Movement on site was explored in greater depth in order to create this diagram.

The site movement was recorded using the time-lapse function on a video camera. This footage was recorded midweek from approximately 8am – 1pm. The recording was intended as a representative of all site movement. The quantity of site movement outside of these hours will vary, but desire lines and the relative volume of movement per pedestrian route will remain largely the same. The only major difference is that the site is used as a public car park after hours, whereas on weekdays it is a private car park servicing staff of the Auckland City Council building. Therefore during the recorded time frame a greater percentage of pedestrian movement was directed towards the Auckland City Council building. These differences were observed and accounted for in further processing, but re-recording site movement during the weekend was not considered necessary.

This movement was then mapped digitally using 3D Studio Max. Splines were drawn tracing of the movement of every pedestrian and vehicle over the course of the footage. This produced images that clearly show movement paths on site (see Appendix B for a further image). These images were then abstracted into drawings of pedestrian movement, including the proposed pedestrian link through the site up to the corner of Mayoral Drive and Queen Street (see Figure 3.22).

Figure 3.21 Key:
- Pedestrian Movement
- Vehicle Movement
Figure 3.22 Abstracted pedestrian movement
This mapped pedestrian movement was then expressed in two models which explore the potential of how movement could inform the building design in three dimensions. First the ‘desire lines’ of site movement were modelled from layered Perspex. Although this model did not have major design implications, it was effective in expressing the volume of movement throughout the site and the movement paths of individual people.

Figure 3.23  Perspex model expressing site movement

The second model features the pedestrian movement paths cast as voids in resin. The form of these voids was derived from the abstracted drawing of site movement. It was hoped that the resin would be sufficiently transparent so that the form of the voids would be visible when light shone through them. In reality too much chalk was added so the resin was almost completely opaque. However this formal expression of movement would later influence the building design. The voids cut through and expose the interiors of the building, which would traditionally be hidden from public view.

Figure 3.24  Resin model expressing site movement
CIRCULATION DIAGRAM

This site movement research and analysis was then developed into a diagram demonstrating the primary circulation routes through the building.

Figure 3.25 Key:
- Pedestrian movement: upper level
- Pedestrian movement: lower level
- Vehicle movement
- Private space
- Public space

Figure 3.25 Circulation diagram expressing the public-private gradient
4  DESIGN PROCESS
DRAWN OVER PHOTOGRAPHS

A difficulty encountered at this stage in the process was incorporating both the dancer exploration and the study of site movement into a single building. The first step in attempting to do so was by drawing over micro photographs of the dancer outline model, adding function, people, and therefore scale. This assisted in translating the dynamic model qualities into architectural form. Spatial layering in these images also informed the planning and circulation of the building.

Figure 4.1 Drawn over photographs
One image was particularly useful in terms of its spatial relationships. The split levels in the model allow the public to engage with spaces both below and above their own level. The drawing also suggests a patchwork of spaces of public and private use. This poses a different approach to the traditional spatial relationships within a performing arts building, where spaces of public and private use are mostly segregated. Alternating these spaces creates increased opportunities for engagement and exposure as pedestrians move through the building. It also generates similarities between a performing arts building and an art museum. This enables visitors to circulate through a series of exhibition spaces where they gain views into dance studios and performance spaces.

Figure 4.2 Patchwork of spaces of public and private use
**PLAN DIAGRAMS**

This idea was further developed through two plan diagrams. These diagrams were drawn chiefly to clarify ideas, and were not intended as actual floor plans. They portray ideas of patchwork spaces, and the gradient of spaces of public to private use. The second diagram develops these concepts by introducing the three spatial boundary conditions illustrated earlier, where boundaries can either be solid to separate spaces, overlap to form spaces of shared use, or transparent to allow interaction between spaces (see Figure 4.3). This diagram highlighted the need to control which spatial boundaries allowed or denied interaction in regards to pedestrian movement through the building.

Figure 4.3 Plan diagram 2

**1:500 WORKING MODEL**

Initially a 1:500 working model was built to explore site massing. From this model the building was further developed through drawing.

Figure 4.4 1:500 working model
**PERSPECTIVE SECTIONS**

An initial perspective section was drawn of the key circulation route through the building. This was then developed into a larger section which led to spatial planning. These sections aimed to translate the form and spatial relationships of the models and photographs into a building on site. Assessing these drawings suggested a failure to reflect the ways in which spaces in the model transition into neighbouring spaces. Perspectives were a key part of the design process as much of the research and formal expression is driven by what people see and experience as they move through the building. Orthographic drawings cannot portray this experience to the same extent.

*Figure 4.5 Initial perspective section*
Figure 4.6 Perspective section development
**MOVEMENT THROUGH THE BUILDING**

Gordon Cullen’s ideas of the existing and emerging view have the potential to be applied to this building. Pedestrians may gain a glimpse of the dancers or Myers Park, a view which would slowly emerge as they move through the building. This may serve to build anticipation and interest in the performance.

The physical form of the building could foster an awareness of pedestrians’ own movement. Angular forms of the public spaces and central atrium can do so by generating a sense of disorientation. However these diagonal forms are not appropriate for dance studios, which require more regular spaces. The approach to circulation around the dance studios was influenced by Le Corbusier. Ramps alongside studios will subtly form an awareness of the dancer’s movement in relation to self-movement. Ramps enable pedestrians to engage with the performance without having to look down at their feet.

The initial intention was for ramps to replace stairs throughout the building. Floor plans developed from the initial perspective sections were used to test this idea. The total use of ramps was impractical as much of the floor area would then be dedicated to circulation. Instead ramps were used selectively beside some studio or performance spaces.

**CROSS SECTION DEVELOPMENT**

A problem arose when this design was drawn in cross section. The changes to the design meant that the section featured uncomfortable spaces which no longer possessed the spatial qualities and visual connections present in the initial drawings. The building also lacked a spatial hierarchy, as no prominence was given to any one space. In an attempt to resolve this problem, the building was developed into a series of regular spaces which performed better functionally, but lost most of the dynamic expression of the dancer models.

![Figure 4.7 Functionally developed cross section](image)
Instead of continuing to pursue this unsuccessful form, a step back was required to discover ways in which the dancer models could better translate into an architectural form. In order to regain these model qualities, two drawn over model photographs were joined to create a conceptual form for the central atrium space. This form was developed to later produce the final design.

Figure 4.8 Conceptual atrium form
5 CRITICAL APPRAISAL
5.1 RESEARCH-BY-DESIGN PROCESS

The site investigation was effective in studying movement to form the building’s key circulation routes. Existing pedestrian movement is channelled through the building to enable interaction with dancers. The exploration of dancers’ movement formed the conceptual basis for the project. Due to conflicting site and programmatic requirements, some of these concepts were either partially implemented or filtered out.
5.2 DESIGN OUTCOME EVALUATION

FORMAL OVERVIEW:

An example of this is the external building form. The treatment of the Mayoral Drive and Queen Street facades are derived from the flat transparent façade of the dancer outline model. In this model the angular intersecting boundaries are fully contained within the façade. However when applied to the building, the angular form instead protrudes from the façade, weaving in and out of the building core. This form surrounds the central atrium space and is predominantly expressed on the third floor of the building. The theatre foyer wraps around the auditorium and central void, penetrating the glass envelope and moving through the building core to form a studio space overhanging Mayoral Drive. The form re-enters the building core to join the neighbouring Queen Street buildings (see Appendix C for conceptual drawings). The protruding studio is partially clad with horizontal timber battens which continue into the building in order to define the angular form. The Mayoral Drive facade creates a plain backdrop to the exposed studio spaces and dynamic form of the overhang. The studio overhanging Mayoral Drive serves to draw attention to the building and therefore the dancers in which it frames.

Figure 5.1 1:200 working model
OUTDOOR COURTYARD

The outdoor courtyard is located on the northern edge of the site. The majority of people attending the theatre will park in the Civic Car Park, accessing the site on foot from Aotea Square. The project aims to draw people into this courtyard, where they can then access the dance school, theatre and pedestrian link to Myers Park. This courtyard placement also avoids building directly against the back facades of the Queen Street buildings and the future Q Theatre. These neighbouring facades enclose the courtyard and add contrasting detail and character to the space. The courtyard creates a common space which would service the Basement Theatre, future Q Theatre and the proposed dance school and theatre. This space contains a café, bar, social seating and an outdoor performance venue.

This outdoor performance venue may be used for formal performances, pre-show entertainment or as an informal ‘street theatre’ space. It will have a theatre-in-the-round format with stepped seating around a central performance space. This format was chosen to create variation from the surrounding venues and spaces. In contrast to the proscenium format of the theatre auditorium, theatre-in-the-round allows the audience to choose their own viewpoint from which to engage with the performance.

CIRCULATION

The central atrium of the building is accessed via an external staircase from the courtyard. This main entrance is shaped to funnel people into the building, where dancers are immediately visible. Pedestrians entering the building from Queen Street are led down a ramp beside a void space containing planting. This ramp features a view into an overhead dance studio. The circulation route then steps down underneath this studio, opening into the large central atrium. People can disperse throughout the building from this space.

ATRIUM

The central atrium is a space of shared public and private use. It contains both circulation and performance. This is a flexible space which can be formatted by performers to experiment with audience interaction. Bleacher seats can be used to watch either a performance or the everyday activity of pedestrians in the space. This atrium can also be used for formal performances and events.
The concept for the atrium was influenced by the joined model photographs. Here the surface of the split spatial boundary folds down one wall. However when applied to the building this wall blocked the key pedestrian route to Queen Street, as well as the view into the neighbouring dance studio. Instead the upper floor plate is split above the atrium. This emphasises the directional movement towards Queen Street. Pedestrians travelling over this split floor plate can look down through the gaps to obtain a bird’s eye view of the performance and social activity of the foyer.

**Figure 5.2 Atrium space of the working model**

**AOTEA SQUARE – MYERS PARK CONNECTION:**

It was important to clearly portray the existence of key pedestrian routes through the building to those passing by. Therefore requirements of unobstructed visual connection through the circulation routes prevented the application of concepts of the emerging view and the patchwork of spaces of public and private use.

Direct visual connection was achieved between Aotea Square and Myers Park (see Figure 5.3). The existing visibility of this pedestrian link has been maintained and incorporated into the building. The tunnel under Mayoral Drive features a ramp that winds around a series of performance platforms at varying levels. This will enable pedestrians to directly engage with the dancers’ movement. Visual connection to dancers will illustrate the function of this building to pedestrians in Aotea Square and Myers Park. This pedestrian link will be gated for security when required.
Another technique used to connect the building to Myers Park was the placement of a skylight in the centre of Mayoral Drive. This provides natural light to the 25 metre long tunnel underneath Mayoral Drive. It also creates a visual link to the sky, which serves to reduce the perceived length of the tunnel and the mass of Mayoral Drive. From street level, this skylight will illustrate the pedestrian connection from the main building volume, under Mayoral Drive and into Myers Park, where the performance stage is visible.

Internal voids containing planting will allow pedestrians to experience some of the park while moving through the building. This is a technique influenced by the De Young Museum, designed by Herzog & de Meuron. The two voids, placed beside the central atrium and alongside the existing Queen Street buildings, serve to signpost the route to the park. The central void features trees which will be visible from Myers Park. This creates a visual connection between the building and the park. A stage located in Myers Park beside Mayoral Drive will enhance this connection, bringing some of the building out into the park. This will enable dancers or musicians to perform to an audience in the park.
**PUBLIC – PRIVATE GRADIENT**

It was difficult for the concept of a gradient from spaces of public to private use to radiate out horizontally from the circulation spaces. This is due to the placement of circulation routes and the restricted area of the site. This gradient was mostly applied to the vertical dimension, where a lack of pedestrian traffic on the upper levels ensures a greater level of privacy. Four levels of spatial privacy exist in the building, but not necessarily in a sequential order.

**DANCE STUDIOS**

Dance studios throughout the building have varying levels of privacy. This is to cater to both rehearsals which need to be hidden from sight and instances where exposure is required. The exposed studios provide an opportunity to utilise the ideas of Jerzy Grotowski. The public are able to engage with dance in a way that does not involve the “superfluous” aspects of theatre, but is concentrated on the encounter involving performer and audience. These studios are fully visible from either outside or inside the building.

The studio overhanging Mayoral Drive is orientated towards the Queen Street intersection in order to take advantage of the exposed site. This was influenced by the Lincoln Center for the Performing Arts, in which a dance studio is visible from a busy Broadway intersection. Glazing each side of the overhang will eliminate the need for artificial lighting during the day. Therefore the façade will be animated with the silhouettes of dancers both day and night. This effect is replicated with the large overhang on Queen Street. This façade opens out to reveal the internal activities of the gymnasium.

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60 Grotowski and Barba, Towards a Poor Theatre, 19.
The Mayoral Drive street façade is clad with translucent glass. This façade encloses a dance studio and the gymnasium. The northern void beside the existing Queen Street buildings will provide natural backlighting to these spaces. Therefore the vague silhouettes of dancers will be visible through the facade, but their identity and exact movements will remain hidden. At night this façade will glow to attract attention to the building. The pre-performance rehearsal studio has louvres that give the studio the option of being exposed or concealed from public view. As few members of the public will occupy the top floor of the building outside performance times, studios on this level remain largely hidden.

Some studio and casual performance spaces have been successful in terms of the pedestrian’s experience of movement. Casual performances facilitate creativity and are integrated into key circulation spaces to encourage an audience. The dance studio spaces are effective in terms of basic spatial connections amongst different levels. However, upon reflection the building could also have incorporated more careful controlling of the view into these studio spaces. This could have been done by further exploring the concept of how a split spatial boundary can control what is visible from different viewpoints. In order to apply this concept spatially a more complex circulation system was needed, which project requirements of visual connection did not allow. In hindsight, the building programme would have benefited from additional private dance studios to cater to performance rehearsals which must be hidden from public view.

THEATRE AUDITORIUM

The theatre auditorium is located on the corner of Mayoral Drive and Greys Ave. It is visible from Aotea Square and Myers Park, as well as the surrounding streets. The theatre volume aims to reinforce the connection between the Auckland Town Hall and Greys Avenue. This link was damaged with the construction of Mayoral Drive and the lack of architecture on site, breaking the line of buildings down Greys Avenue. The fly tower has a similar cross section to the opposite building on Mayoral Drive, which will enforce this connection. This rectangular fly tower will serve to anchor the dynamic form of the rest of the building.
The public entrance to the theatre auditorium is orientated towards the courtyard. The foyer wraps around the back of the theatre, overlooking the outdoor performance space (see Figure 5.6). The stage features a polymer-dispersed liquid crystal glass backdrop overlooking Mayoral Drive. This is a material used by Diller Scofidio + Renfro in the School of American Ballet. When transparent this provides the option of using the street and urban environment as the background of a performance, creating a similar effect to the Squat group’s performance in a New York shop window. It will allow passersby a view into the theatre, giving them the rare opportunity to experience the preparation and technical aspects of the performing arts. This includes dancers rehearsing on stage and the installation of stage sets and lighting. The glass wall will also let the public experience the auditorium space from the perspective of a performer on stage.

This glass will be translucent without the application of a current. It may then be used as a screen backdrop which stage lighting may be projected on to. In this case the coloured light on the glass will animate the street façade, instead of the actual performance. When the liquid crystal glass is not desired in a performance, a backdrop curtain will fall two metres in front of this wall to form a crossover space behind the stage. This option provides a conventional theatre auditorium when required.

The main auditorium will seat 400 people, filling some of the need for medium sized venues in Auckland City. The theatre will be designed specifically for dance performances with a proscenium stage format. The balcony will bring the audience close to the stage so that every member can experience the dancers’ facial expressions. An intimate theatre environment is formed by allowing people to see other audience members on the side walls of the balcony.
5.3 INDUSTRY APPLICATION

Although all concepts from the research process were not implemented in the finished design, this does not diminish their future use. Concepts that were limited in their application may be successfully applied to future buildings where the site and programme allow it.

This research deals with the relationship between spaces of public and private use. In this case the application is a performing arts building, but the contribution of this project is not limited to this niche. The core of this research could be applied to any building which contains both public and private functions, a condition of many buildings within an urban environment. This project explores how the public can experience more of a building, instead of having limited interaction at the ground floor. It illustrates ways in which the public can interact with private building functions, challenging the traditional spatial planning and privacy of a building.
CONCLUSION

Public experience of the performing arts is less than it could be, which has lead to an investigation of how architecture can better facilitate this interaction. Public engagement is enhanced by exposing private activities which are traditionally hidden from view. The project explores how existing pedestrian movement on site could be channelled through the building to increase public interaction with the activities in these interior spaces. Circulation has been choreographed to enhance the experience of movement, by stimulating an awareness of the dancers’ movement in relation to self-movement. Dancers’ movement was studied to explore the interaction between spaces of public and private use. The process led to a series of design concepts which directed the development of the project, both formally and in terms of spatial relationships. This allowed the creative dynamic of dance to be expressed formally in the building.

This is a project that benefits the performers, public and urban environment. Dancers are given the opportunity to perform regularly, increasing their experience and publicity. The building challenges dancers to explore new ways of engaging the audience. It allows the public to regularly observe performance activities, which may challenge them to get involved by attending dance classes. Performance in this venue enhances the urban environment by animating the building facades and surrounding public spaces.

This project extends the recent changes in the design of performing arts buildings. Research into experimental performance, experiencing movement and the ordering of space has been applied to the building to enhance the exposure and experience of private functions. The design concepts could be applied to future public buildings in an urban environment.
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SITE ANALYSIS: BUILDING USE

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- Entertainment
- Food Retailer
- Retail
- Residential
- Offices
- Education
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